

Weekly Report

2018.1105-2018.1111

1.This Week

Deep Learning Power Grid Project:

1.We explore the original dataset to check if the dataset itself is able to be separated by non deep learning methods:

- We tried eight different similarity measures on different sample pairs, including ED, Pearson distance, STS, DTW, Probability Based Distance, KL Distance, J divergence distance, SVD based distance.
- Four measures works best (ED, STS, LPC, Probability based). Other methods will get unbelievable ranges (hundreds) and cannot tell the difference between buses.
- We perform trials on different samples pairs, including computing the distance between high voltage fault center sample and low voltage fault center sample(high-low), high-high, low-low. And also tests sample pairs of large fault center distance and small fault center distance. But we barely found any patterns for the four similarity measures in these cases (it is quite unexplainable).
- The SVD based method is unstable and will get distinctively different results for similar sample pairs and get similar results for different sample pairs.

Working Hour: (except nap and eat time)

8-9 hours / week day

(went home on weekends)

Total Working Hour this week: 43 hours.

Other

1.Prepare the slice for the group meeting representation on 11.12.

Paper Reading

I have read five papers this week but forget to send these paper to my laptop.(I went home on this weekend and came back on Sunday evening.) So I'm sorry that I will add my this week's paper reading report on Monday (11.12) morning when I go to the lab.

2.Progress

Work	Deadline	Progress
Power grid paper with Deeping learning	12.15	1.explore the original data space.

Work	Deadline	Progress
SQC Paper	-	1.Delayed